

REMARKS

The present Amendment amends claims 1, 2, 5, 7, 8, and 10, cancels claims 3, 4 and 6 and leaves claim 9 unchanged. Therefore, the present application has pending claims 1, 2, 5, 7-10.

35 U.S.C. §102 Rejections

Claims 1-10 are rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,859,768 to Wakelam, et al. ("Wakelam"). As indicated above, claims 3, 4 and 6 were canceled. Therefore, this rejection regarding claims 3, 4 and 6 is rendered moot. Regarding the remaining claims 1, 2, 5, and 7-10, this rejection is traversed for the following reasons. Applicants submit that the features of the present invention as now more clearly recited in claims 1, 2, 5, and 7-10 are not taught or suggested by Wakelam, whether taken individually or in combination any of the other references of record. Therefore, Applicants respectfully request the Examiner to reconsider and withdraw this rejection.

Amendments were made to the claims to more clearly describe features of the present invention. Specifically, amendments were made to the claims to more clearly recite that the present invention is directed to a remote acceptance design system and an elevator remote order acceptance method, as recited, for example, in independent claims 1, 7 and 10.

The present invention, as recited in claim 1, and as similarly recited in claims 7 and 10, provides a remote order acceptance design system. The system includes a means for sending a list of basic specification of a plurality of products that can be sold, to a customer's terminal, according to the customer's requirement via a wide area network. The system also includes a database that stores CAD symbols,

where each CAD symbol includes at least product name information, structure information, and occupied space information indicating a space that should be secured for installing the product, for each of the products that can be sold. The system further includes a first input receiving means for receiving input of a requirements specification of an order-made product that includes one or more equipments. The system also includes a data taking means for retrieving the basic specification information stored in the database, based on the requirements specification whose input is received by the first input receiving means, and for taking out a corresponding CAD symbol that includes the occupied space, for the database. Also included in the system is a data output means for outputting the CAD symbol taken out by the data taking means to an input source that has input the requirements specification of the order-made product. The system also includes a second input receiving means for receiving input of the customer's design data that include the CAD symbol of the order-made product position on the customer's design data by the customer via the wide area network. Furthermore, the system includes a means for extracting structural features within the occupied space information of the CAD symbol of the order made product from the customer's design data received by the second input receiving means, and for judging the existence of interference in the occupied space of the order-made product, based on the structural features. The system also includes an installation drawing generation means for taking out the structure information corresponding to the CAD symbol from the database, when it is judged that interference does not occur in the occupied space of the order-made product, and for generating installation drawing data for the order-made product based on the structure information and the customer's design

data. According to the present invention, the data output means outputs the installation drawing data generated by the installation drawing generation means to an input source that has input said customer's design data. The prior art does not disclose all of these features.

The above described features of the present invention, as now more clearly recited in the claims, are not taught or suggested by any of the references of record, particularly Wakelam, whether taken individually or in combination with any of the other references of record.

Wakelam teaches computer-implemented automated building design and modeling, and a project cost estimation and scheduling system. However, there is no teaching or suggestion in Wakelam of the remote acceptance design system or the elevator remote order acceptance method as recited in claims 1, 7 and 10 of the present invention.

Wakelam discloses a computer-implemented automated building design and modeling and construction project cost estimating and scheduling system ("DMES system"). The DMES system provides a central source for all of the design and construction information for a construction project in a coordinated two-dimensional and three-dimensional spatial database that is freely accessible by all of the members of an interdisciplinary construction project team as a means to produce automatically coordinated design development and construction document information. The DMES system offers a plurality of objects, including elements and massing elements arranged in an assembly hierarchy. Each of the objects includes programming code that defines an interface and discrete internal functions that

define its behavior. The DMES system provides all of the members of the project team with methods and tools for designing a project scenario cooperatively.

One feature of the present invention, as recited in claim 1, and as similarly recited in claims 7 and 10, includes a database that stores CAD symbols, where each CAD symbol includes at least product name information, structure information, and occupied space information indicating a space that should be secured for installing the product, for each of the products that can be sold. Wakelam does not disclose this feature. For example, unlike in the present invention, Wakelam does not disclose information that corresponds to the occupied space information, which indicates a space that should be secured for installing the product. Therefore, Wakelam does not teach the claimed features.

Another feature of the present invention, as recited in claim 1, and as similarly recited in claims 7 and 10, includes a second input receiving means for receiving input of the customer's design data that include the CAD symbol of the order-made product position on the customer's design data by the customer via the wide area network. Wakelam does not disclose this feature. In Wakelam, all of the members of the project team access the coordinated two-dimensional and three-dimensional spatial database, and each member is able to access other member's building models through the spatial database in the DMES system (see, e.g., column 2, line 61 to column 3, line 11). On the other hand, in the present invention, the database that stores CAD symbols, relates to a plurality of products that can be sold. The system of the present invention retrieves the basic specification information stored in the database, based on the requirements specification from a customer and takes out a corresponding CAD symbol from the database, and outputs the CAD symbol to

the customer. The system also receives input of the customer's design data that include the CAD symbol of said order-made product positioned on the customer's design data by the customer, via a wide area network, rather than through the database as in Wakelam. Accordingly, Wakelam is quite different from the present invention.

Yet another feature of the present invention, as recited in claim 1, and as similarly recited in claims 7 and 10, includes a means for extracting structural features within the occupied space information of the CAD symbol of the order-made product from the customer's design data received by the second input receiving means, and for judging the existence of interference in the occupied space of the order-made product, based on the structural features. Wakelam does not disclose this feature. Wakelam discloses where the DMES system is capable of detecting physical clashes between various components of the building model as the model is being automatically assembled and automatically redesigns the model to relocate the affected components to avoid the clash. This automatic clash detection is part of the assembly code included in each massing element and each element uses its own specific functions to determine the parameters of a clash and the rules by which to reposition the instance. This process has a small incremental impact on the speed of the assembly process, and completely removes the need for a series of long clash detection exercises after the model is complete (see, e.g., column 4, lines 38-59). On the other hand, in the present invention the system determines the existence of interference between the customer's design data (a complete model) and the occupied space information of the CAD symbol of said order made product

(another complete model). This feature of the present invention is quite different from Wakelman.

Another feature of the present invention, as recited in claim 1, and as similarly recited in claims 7 and 10, includes an installation drawing generation means for taking out the structure information corresponding to the CAD symbol from the database, when it is judged that interference does not occur in the occupied space of the order-made product, and for generating installation drawing data for the order-made product based on the structure information and the customer's design data. Wakelman does not disclose this feature. In a process flow diagram for developing one or more building models using the DMES system of Wakelam, a client performs his part in requesting to develop a project scenario and approving a building model, cost estimate, and construction schedule. However, a client of Wakelman does not participate in designing the model (see, e.g., column 14, lines 15-55). On the other hand, in the present invention a customer, designs his own product and requests parts that should be put in his own product. The customer positions the CAD symbol of the order-made product on the customer's design data and sends his design data that include the CAD symbol to the part manufacturer. As such, the present invention is quite different from Wakelman.

Therefore, Wakelam fails to teach or suggest "a database that stores CAD symbols, each including at least product name information, structure information indicating structural features of the product, basic specification information, and occupied space information indicating a space that should be secured for installing the product, for each of said products that can be sold" as recited in claim 1, and as similarly recited in claims 7 and 10.

Furthermore, Wakelam fails to teach or suggest “a second input receiving means for receiving input of the customer’s design data that include the CAD symbol of said order-made product positioned on the customer’s design data by the customer via the wide area network” as recited in claim 1, and as similarly recited in claims 7 and 10.

Even further, Wakelam fails to teach or suggest “a means for extracting structural features within the occupied space information of the CAD symbol of said order made product from the customer’s design data received by said second input receiving means, and for judging existence of interference in the occupied space of said order-made product, based on said structural features” as recited in claim 1, and as similarly recited in claims 7 and 10.

Still even further, Wakelam fails to teach or suggest “an installation drawing generation means for taking out the structure information corresponding to said CAD symbol from said database, when it is judged that interference does not occur in the occupied space of said order-made product, and for generating installation drawing data for said order-made product based on said structure information and said customer’s design data” as recited in claim 1, and as similarly recited in claims 7 and 10.

Therefore, Wakelam does not teach or suggest the features of the present invention, as recited in claims 1, 2, 5, and 7-10. Accordingly, reconsideration and withdrawal of the 35 U.S.C. §102(e) rejection of claims 1, 2, 5, and 7-10 as being anticipated by Wakelam are respectfully requested.


The remaining references of record have been studied. Applicants submit that they do not supply any of the deficiencies noted above with respect to the references used in the rejection of claims 1, 2, 5, and 7-10.

In view of the foregoing amendments and remarks, Applicants submit that claims 1-2, 5, 7-10 are in condition for allowance. Accordingly, early allowance of claims 1-2, 5, 7-10 is respectfully requested.

To the extent necessary, Applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, or credit any overpayment of fees, to the deposit account of Mattingly, Stanger, Malur & Brundidge, P.C., Deposit Account No. 50-1417 (referencing attorney docket no. 566.41234X00).

Respectfully submitted,

MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C.


Donna K. Mason
Registration No. 45,962

DKM/cmd
(703) 684-1120